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ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR HE01-003 HENRY 07/23/99 09/360,881 **EXAMINER** QM12/0411 VARMA,5 JOHN S REID 1926 SOUTH VALLEYVIEW LANE ART UNIT PAPER NUMBER SPOKANE WA 99212-0157 3711

DATE MAILED: 04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No. 09/360,881

Applica (s)

Henry

Examiner

Sneh Varma

Group Art Unit 3711



| X Responsive to communication(s) filed on Jan 23, 2001 | |
|---|---|
| X This action is FINAL . | |
| ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213. | |
| A shortened statutory period for response to this action is set to e is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extensions 37 CFR 1.136(a). | respond within the period for response will cause the |
| Disposition of Claims | |
| | is/are pending in the application. |
| Of the above, claim(s) | is/are withdrawn from consideration. |
| Claim(s) | |
| | |
| ☐ Claim(s) | |
| ☐ Claims | |
| Application Papers | |
| ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. | |
| ☐ The drawing(s) filed on is/are objected | d to by the Examiner. |
| ☐ The proposed drawing correction, filed on | is 🗌 approved 🔲 disapproved. |
| \square The specification is objected to by the Examiner. | |
| The oath or declaration is objected to by the Examiner. | , |
| Priority under 35 U.S.C. § 119 | |
| Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). | |
| ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been | |
| ☐ received. | |
| received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 17.2(a)). | |
| *Certified copies not received: | ernational Bureau (PCT Hule 17.2(a)). |
| ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | |
| Attachment(s) | |
| □ Notice of References Cited, PTO-892 | |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). | |
| ☐ Interview Summary, PTO-413 | |
| Notice of Draftsperson's Patent Drawing Review, PTO-948 | |
| ☐ Notice of Informal Patent Application, PTO-152 | |
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| | |
| SEE OFFICE ACTION ON THE FOLLOWING PAGES | |

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DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment filed January 23, 2001, in which Claims 1-2, 4, 8-9, 13-16 were amended and Claims 22-25 were added. In response to applicant's amendment, the examiner has set forth a rejection below.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed new subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required. The newly amended claims have introduced new matter. The scope of the amended claims and the scope of the specification do not agree. The new subject matter:

In Claim 1 and 15, the recitation of "longer than a fourth adjacent golf club...";

In Claim 4, 8, 13, 14, the recitation of "fifth golf club..";

In Claim 4 and 23, the recitation of "0.72 inches", is not in agreement with the disclosure in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 1,2, 4, 8, 9, 13 -16, and 22-25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendments to the above claims include new matter. The original disclosure is not supported by the invention as claimed in the amendment filed. In addition, the limitations claimed contain enablement problems.

The scope of the amended claims and the scope of the specification do not agree. In Claim 1 and 15, the recitation of "longer than a fourth adjacent golf club..." And in Claim 4, 8, 13, 14, the recitation of "fifth golf club..." does not agree with the definition of the adjacent clubs in the Specification, page 3, lines 3-4 which does not include a "fourth" and fifth clubs in the definition. In Claim 4 and 23, the recitation of "0.72 inches", does not agree with the disclosure in the specification which only discloses a dimension of 0.75 inches. Not 0.72 inches.

- 5. Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for specification, does not reasonably provide enablement for amended claims 1, 2, 4, 8, 9, 13-16 and 22-25. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation of "at least about" in Claims 1 and 15 is indefinite. Claims 2-14 and 16-25 are also rejected as they depend on claims 1 and 15 respectively.

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Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-9, 15-17, 18-19 and 22-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kajita et al. '380 (Kajita).

Kajita discloses a set of golf clubs comprising a plurality of adjacently sequenced golf clubs, wherein a first golf club in the set has a club length at least about 0.6 inches to 1 inch longer than a second adjacent golf club in the set and a third golf club in the set has a club length which is less than 0.6 inches longer than a fourth adjacent golf club in the set (Col. 3, lines 30-33). In addition, the set has a club length between about 1.2 inches and 2 inch longer than the second alternating sequential adjacent golf club in the set (Abstract (15-30 mm); Column 3, lines 1-34).

Kajita also discloses that the set has a lie angle between about 0.6 degrees and I degree less than the second adjacent golf club in the set and that the set has a lie angle between about 1.2

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degrees and 2 degrees less than the second alternating sequential adjacent golf club in the set (Abstract; Column 3, lines 35-39).

In addition, Regarding Claims 22-25, Kajita discloses that the set of golf club comprises at least 12 golf club (Column 3, lines 32-34); the first golf club in the set has a club length which is greater than 0.72 inches longer than the second golf club in the set (Figure 3, lines 30-34); the set of golf clubs comprises "at least" 6 golf clubs (Column 3, lines 30-34) and that the first golf club in the set has a club length which is "greater" than 1.42 inches longer than the second golf club in the set.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-4 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg '686 (Lundberg) in view of, Peters et al. '112 (Peters) and Adams et al. '296 (Adams).

Lundberg discloses a set of golf clubs comprising a plurality of adjacently sequenced golf clubs, wherein a first golf club in the set has a club length "at least about" 0.6 inches longer than a second adjacent golf club in the set and that the set has a club length between "about" I inches and 2 inch longer than the second alternating sequential adjacent golf club in the set However, Lundberg fails to disclose that the club length is 0.75 inches longer and that the set has a club

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length between about 1.2 inches and 2 inch longer than the second alternating sequential adjacent golf club in the set. Peters teaches that it is known in the art to vary the length of the shaft in a set (Column 1, lines 63- 64; Column 2, lines 6-10) and Adams teaches the use of dynamically matched sets by setting the moment of inertia which is a function of club shaft length and weight (Column 5, lines 12-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Peters and Adams in the Lundberg device to design a set with the length difference of 0.75 inches between the adjacent clubs and a difference of 1.2 to 2 inches between the second alternating sequential adjacent golf club in the set to improve the performance of the set of clubs.

12. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 1 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose the set has a lie angle between "at least about" 0.6 degrees and 1 degree less than the second adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree(Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

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13. Claims 8 -9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 4 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose the second golf club has a lie angle at least about 0.6 degrees lets than the third golf club. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree(Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 0.6 degree lie angle depends on the cost and requirements for manufacturing.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 16 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the set has a lie angle between about 1.2 degrees and 2 degrees less than the second alternating sequential adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree(Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent

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golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 1.2- 2 degree lie angle depends on the cost and requirements for manufacturing.

15. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 17 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the first golf club in the set has a lie angle of about 1.5 degrees less than the second alternating sequential adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree (Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 1.5 degree lie angle depends on the cost and requirements for manufacturing.

16. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita, as applied to claim 1 'above, and further in view of Chen et al. '138 (Chen).

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Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

17. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita, as applied to claim 8 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs. For an artisan skilled in the art a choice of the lie angles will be dependent upon the cost and the manufacturing requirements.

18. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita, as applied to claim 7 above, and further in view of Chen.

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Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs. For an artisan skilled in the art a choice of the lie angles will be dependent upon the cost and the manufacturing requirements.

19. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita, as applied to claim 16 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second alternating sequential golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

20. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita, as applied to claim 18 above, and further in view of Chen.

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Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second alternating sequential golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

21. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 1 above, and further in view of Nishizawa et al. '198 (Nishizawa).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the first golf club in the set has a club head weight between about 8 grams and 12 grams less than the second adjacent golf club in the set. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

22. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters, Adams, and Sherwood, as applied to claim 8 above, and further in view of Nishizawa.

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The modified Lundberg device discloses the invention as described above, however, fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

23. Claims 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters, Adams, and Sherwood, as applied to claim 7 above, and further in view of Nishizawa.

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

Response to Arguments

24. Applicant's arguments with respect to the rejection of Claims 1-9, 15-17, and 18-19 under 35 U.S.C. 102(b) as being anticipated by Kajita et al., Claims 1-4 and 15-17 under 35

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U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters and Adams, Claims 5-7, 8-9, 18, and 19 under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters, Adams and Sherwood, Claims 10-12, 13, 14, 20, and 21 under 35 U.S.C. 103(a) as being unpatentable over Kajita et al. in view of Chen, Claims 10-12 under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters, Adams and Nishizawa, and Claims 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of Peters, Adams and Sherwood and further in view of Nishizawa have been carefully considered, but all the arguments are not deemed persuasive. In response to applicant's amendments and arguments the examiner has set forth a new rejection above.

In reference to the arguments it should be noted that Kajita discloses the rates of 0.59, 0.75, 0.79 and 1.118. Kajita further discloses that a first golf club in the set has a club length at least about 0.6 inches to 1 inch longer than a second adjacent golf club in the set and a third golf club in the set has a club length which is less than 0.6 inches longer (as pointed out by the applicant page 7, lines 10-12; Page 8, lines 9-15) than a fourth adjacent golf club in the set (Col. 3, lines 30-33). One skilled in the art would recognize that these rates are "at least about" 0.6 and 1.2. The Applicant has argued that the club-club length variance is the focus of the instant invention and that a formula governs this determination. This argument is not germane to the Claims since the formulae is not claimed by the inventor. If the formulae is the novelty in this invention it is not claimed. References clearly disclose and tach that it is well known in the art to vary the club length in a set. Reference clearly disclose the claimed subject matter as pointed out

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by the Applicant on page 8, lines 11-15. A variance of 0.59 is "at least about" 0.6. Since it is well known in the art it is not hindsight. There is no evidence in the record to substantiate that the variance as claimed by the inventor is critical.

Conclusion

- 25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- 26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Varma whose telephone number is (703) 308-8335. The examiner can normally be reached on Monday to Friday from 8:00 A.M. 4:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jeanette Chapman, can be reached on (703) 308-1310. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7768. Any inquiry of a general nature or

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relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1078.

April 5, 2001

Sneh Varma, Patent Examiner

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JEANETTE CHAPMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700